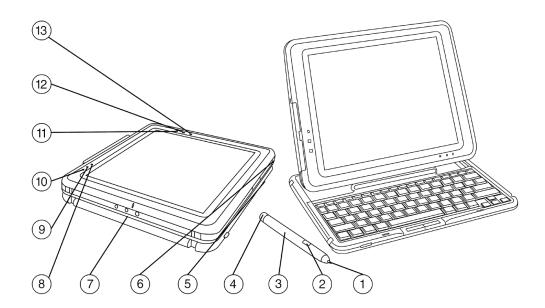
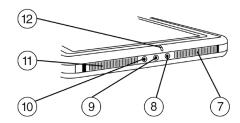
## Overview



- 1. Pen Tip
- 2. Pen Button
- 3. Pen Barrel
- 4. Pen Tether Eyelet
- 5. Battery Bay
- 6. Power Switch
- 7. Mobile Keyboard (attached)

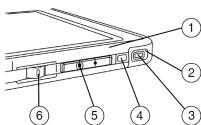
- 8. AC Adapter Light
- 9. Battery Light
- 10. Wireless LAN/Bluetooth™ Activity Light
- 11. Tablet PC Input Panel Launch
- 12. Journal Launch Button
- 13. Rotate Button

### **Front View**



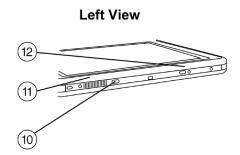
- 1. Integrated Antenna
- 2. Power Switch
- 3. Power/Standby Light
- 4. Display Toggle (F4) Button
- 5. Windows Security Button (CTRL+ALT+DEL)
- 6. Jog Dial



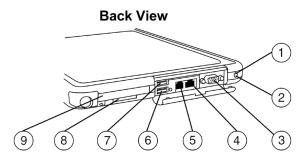


- 7. Speaker (1 of 2)
- 8. Microphone Jack
- 9. Headset Jack
- 10. Audio-out Jack
- 11. Speaker (1 of 2)
- 12. Microphone

Overview



- AC Power Connector
- 2. Integrated IR
- 3. External Monitor Connector
- 4. RJ-45 Network Jack
- 5. RJ-11 Telephone Jack
- 6. External Multibay Connector (USB 2.0)



- 7. USB 2.0 Connector
- 8. Secure Digital (SD) Slot
- 9. PC Card Slot
- 10. Keyboard Connector
- 11. Antenna (not visible from outside of tablet PC)
- 12. Integrated Bluetooth

### At A Glance

- Award-winning design
- Microsoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2
- Intel® Pentium® M and Celeron® M Ultra Low Voltage processors
- Intel 855PM Chipset with rich graphics from NVIDIA GeForce 4 Go 420 32MB (4X AGP)
- Durable magnesium casing
- Weighs 3.1 lb(1.4 kg) with keyboard 4.0 lb(1.8 kg)
- Approximately 0.8 in(2.0 cm) thin
- 10.4-inch XGA TFT display with sparkle-free glass
- Starting with 256 MB or 512 MB of SDRAM upgradeable to 2 GB
- Storage available ranging from 40 GB to 60 GB
- Integrated mini PCI 56K modem plus 10/100 NIC
- Type III Mini PCI integrated WLAN 802.11b WLAN, 802.11b/g WLAN, and 802.11a/b/g WLAN options
- Integrated Bluetooth™ on select models
- Dedicated Secure Digital (SD) slot for removable media
- Integrated IR
- Battery-free, pressure sensitive pen for the ultimate writing experience (application must support pressure sensitivity)
- Additional HP Security Lock Slot

## What's Special

- Flexible design with great performance!
- Ultra-light weight and portable
- Warm swap battery support
- Innovative keyboard attachment
- Docking with or without keyboard
- Easy transitions with multi-monitor docking profiles
- Magnesium alloy case and high quality digital pen with tether

## Standard Features

### Processor and Chipset

Intel Pentium M 753\* (Ultra Low Voltage 1.2-GHz processor, 2-MB cache and 400-MHz Front Side Bus) Intel Pentium M 733\* (Ultra Low Voltage 1.1-GHz processor, 2-MB cache and 400-MHz Front Side Bus) Intel Celeron M 373\* (Ultra Low Voltage 1.0-GHz speed, 512-KB cache, 400-MHz front side bus) Intel 855PM chipset

NOTE: Not available in all regions.

\*NOTE: Intel's numbering is not a measurement of higher performance.

Operating System	Pre-installed	Microsoft Windows XP Tablet Edition 2005 and Windows XP Service Pack 2		
Display	Internal	10.4-inch color TFT XGA with 1024 x 768 resolution (up to 16.7M colors internal)  NOTE: All products have at least 100 degree wide viewing angle. SKUs available with 160- or 100-degree viewing angle.		
	External	Up to 32-bit per pixel color depth Supports 640 x 480, 800 x 600, 1024 x 768, 1280 x 768, 1280 x 1024, or 1600 x 1200 resolutions up to 100-Hz refresh rate, dependent upon monitor capability, and resolution and color depth settings		
Memory	Standard 256- or 512-MB (333-MHz) SDRAM on select models			
	Maximum 2-GB (333-MHz) SDRAM			
	NOTE: Memory is upgradeable to 2 GB with 1 GB (333-MHz) DRAM in each memory slot. One memory slot is available for user configuration. The other slot is factory configured or can be upgraded through an HP authorized service provider.			
	NOTE: Due to the non-industry standard nature of some third-party memory modules, we strongly recommend using only HP branded memory modules to ensure compatibility.			
Graphics	NVIDIA GeForce 4 Go 420 with 32MB (4X APG)			
Audio	16-bit stereo sound			
	2 stereo speakers Headphone out, mi	crophone jack, and headset jack		
Communications	Type III Mini PCI intoptions	regrated WLAN - 802.11b WLAN, 802.11b/g WLAN, and 802.11a/b/g WLAN		
	Internal MDC 56K r	modem		
	Internal 10/100 NI	C		
	Integrated Bluetooth	n (on select models)		
		nly to allow faster downloads from high speed compliant sources. Maximum ad transmission rates currently do not reach 56 KB/s, and will vary with line		
	NOTE Committee	area a selection of the contract of the contra		



NOTE: Communication availability is subject to country regulatory approval.

### Standard Features

### Command Controls Buttons

The tablet PC comes with Command Control Buttons designed to increase customer productivity by providing one-touch access to rotate screen, favorite Internet destinations, files, or applications.

- 3 programmable pen activated buttons (on top front panel)
- 3 programmable side buttons (Qmenu, Esc, and Tab commands)
- 2 additional specific function buttons (Windows security (Ctrl+Alt+Del) and Display toggle)

### Keyboard

95% of full-sized 101-key compatible keyboard with isolated, inverted-T cursor control keys, and right-control key

**NOTE**: A USB Keyboard is required to unbundle software and edit BIOS settings and may be required to install software.

### Pointing Device

Battery-free digital pen with tether (one-year warranty)

Detachable keyboard with pointstick

NOTE: Handwriting recognition software is available in Microsoft Windows XP Tablet PC Edition.

### PC Card Slots

One Type II PC Card Slot that supports both 32-bit CardBus and 16-bit PCMCIA Cards

### Removable Media

One Secured Digital (SD) slot

#### Storage

Internal Hard Drive

40-GB (4200 rpm) or 40-GB, 60-GB (5400 rpm) SMART Hard Drives

NOTE: External MultiBay or Tablet PC Docking Station required for MultiBay drives.

### Multimedia

Integrated 16-bit Sound Blaster Pro-compatible stereo audio

2 Integrated stereo speakers and microphone

Stereo Headphone-out

Mono Headphone-out/Microphone in

Software MPEG1 support

DVD movie playback software available with

- DVD-ROM Drive with DVD movie playback
- DVD/CD-RW Combo Drive
- DVD+RW Drive

**NOTE:** Voice recognition software available in Microsoft Windows XP Tablet PC Edition. An external boom microphone is recommended for voice recognition.



### Standard Features

Interfaces PC Card Slot 1, Type II

Secured Digital (SD) Slot 1 removable media (not SDIO)

External Monitor/Projector 1 Analog VGA

Stereo Headphone 1, 3.5 mm stereo headphone jack

Mono Headphone/

Stereo Microphone in

Microphone

1, 2.5 mm headset jack
1, 3.5 mm microphone jack

Modem 1 RJ-11 NIC 1 RJ-45

USB 2.0 Port 2, 1 with support for External MultiBay

LED Status Indicators 3 (Power connection, battery charge, and wireless active)

AC Power 1 Fast Infra-red (VFIR) 1

Security Setup Password with pen support

Power-On Password with pen support

DriveLock - requires password to access hard drive

Enabled by PC Card options

BIOS WLAN lock – prevents the replacement with unauthorized WLAN cards

2 HP Security locks – physically secure unit while in tablet, docking, or notebook modes

Software Pre-installed Software HP Mobile Printing for Notebooks

HP Help and Support (XP Only) Safety and Comfort Guide Adobe Acrobat® Reader v. 5.10

Microsoft Reader v. 2.5 Zinio Reader v.1.4 Sun Java 1.4

Windows Media Player 9 for XP

HP Tablet PC Tour

\*Intervideo WinDVD Playback Software v. 4\* (Pre-loaded)

**Recommended** Availability of recommended software applications or services may vary by

software/services region and may require additional purchase and/or subscription

FranklinCovey PlanPlus (30 day trial period)

MindJet MindManager 2002 for Tablet PC (21 day trial period)

Alias SketchBook Pro (15 day trial period)

7 inds skelenbook fro (15 day indi period)

Zinio (see Digital Magazine icon on Tablet PC desktop for more information) ScanSoft Omniform Filler 5.1 and Dragon Naturally Speaking Standard

Edition 7.1 (available as a special configuration)

Additional software HP Client Manager Software

available through the web HP ProtectTools Smart Card Security Manager

QuickLook for the HP Tablet PC TC1100 series

\*NOTE: Software is loaded on the hard drive and must be installed by running the Software Setup utility.

### Standard Features

System Recovery

Each unit is shipped with a recovery CD kit containing Operating System Recovery and Driver/Application Recovery CDs. These CDs allow users to either recover or repair the tablet's operating system and select drivers without losing personal data. The Operating System CD also provides the option of reinstalling the operating system software provided with the tablet.

**Power Supply** 

65W External AC Adapter

**Battery** 

40W/Hr internal main rechargeable Lithium-Ion battery (one-year warranty)

Bridge battery - Allows user to swap main battery with the system in standby mode

The HP Compaq Tablet PC TC1100 6-cell primary Lithium-lon battery provides up to 4.5 hours of battery life.

NOTE: Actual results may vary with product model, configuration, and individual usage. Hewlett-Packard testing of a HP Compaq TC1100 with an Intel Pentium M processor 733 1.1 GHz CPU, Windows XP Tablet Edition, 10.4-inch XGA LCD, 512-MB RAM, 40-GB HDD, 6-cell Lithium-Ion battery, and NIC/modem, achieved an overall Business Winstone® 2002 BatteryMark score of 4h 38m Business Winstone 2002 BatteryMark Version 1.0 units. Winstone® is a registered trademark and BatteryMark™ is a trademark of Ziff Davis Publishing Holdings Inc. in the U.S. and other countries. Copyright 2002 Ziff Davis Media Inc. All Rights Reserved. System parameters followed test recommendations: panel brightness 50%, power management scheme – Laptop/Portable, hard drive, standby and video timers set to never, not external devices connected and all wireless turned off.

Battery Re-Charge Time

System in OFF mode or Standby

3 hours

System ON (depending on system power consumption)

3-5 hours

**Power Conservation** 

Instant-on via Standby

Hibernation ACPI compliant

MultiBay Devices (with optional External MultiBay or Docking Station) Under Microsoft Windows XP Tablet PC Edition, MultiBay devices may be hot swapped. Writeable drives should only be swapped with power off. The Common MultiBay devices are compatible across TC1000 and TC1100 tablets, and multiple business notebook platforms enabling a lower total cost of ownership.

### Standard Features

#### Wireless Devices

The HP tablet TC1100 supports a range of secure, integrated wireless LAN options featuring support for the latest industry standards. Integrated Bluetooth is also an option and can be combined with any one of the supported wireless LAN options.

All integrated wireless

Wi-Fi certified

LAN options

Cisco Compatible Extensions support

Wired Equivalent Privacy (WEP) support up to 128bit keys

Wi-Fi Protected Access (WPA) support

802.1x standards support including EAP-TLS, Protected

EAP (PEAP) and Cisco-EAP (LEAP)

Dual antennas integrated in the display enclosure

HP W500 802.11a/b/g Integrated support for 802.11a, b and g

Up to 54mbps throughput performance Advanced Encryption Standard (AES) support

Intel PRO/Wireless 2915ABG 802.11 a/b/g Intel® Centrino™ mobile technology Integrated support for 802.11a/b/g Up to 54mbps throughput performance

wireless LAN Intel PRO/Wireless 2200BG 802.11b/g

wireless LAN

Intel® Centrino™ mobile technology Integrated support for 802.11b, g Up to 54mbps throughput performance Intel® Centrino™ mobile technology

Intel PRO/Wireless 2100 802.11b wireless LAN

Integrated support for 802.11b
Up to 11mbps throughput performance

Integrated Bluetooth Des

Designed to the Bluetooth v1.1 specification

### Docking

The HP Tablet PC Docking Station provides simple and convenient port management MultiBay drives. Features include NIC pass through, four USB 2.0 including 1 Powered External USB MultiBay connector, VGA, line in/line out, and MultiBay slot. The docking solutions are compatible across TC1000 and TC1100 tablets enabling a lower total cost of ownership.

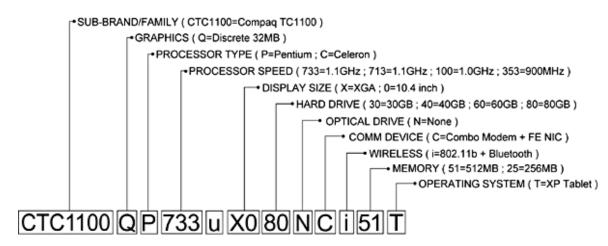
### Service and Support

HP Services includes a One-Year or Three-year, Worldwide Limited Warranty, pick-up or carry-in (in select countries) and toll-free 7 x 24 hardware technical phone support. Battery and digital pen carry a one-year warranty.

NOTE: Certain restrictions and exclusions apply. Consult the HP Customer Support Center for details.

### Standard Features

### The Etymology of a Model name:



CTC1100QP120X040NCf51T

PZ096UA#ABA

(Intel® Centrino™ Mobile

Technology)

CPU Intel Pentium M 753\* (Ultra Low Voltage 1.2-GHz processor, 2-MB

cache and 400-MHz Front Side Bus)

\*NOTE: Intel's numbering is not a measurement of higher

performance.

Operating System Microsoft Windows XP Tablet PC Edition 2005

Display 10.4-inch color TFT XGA with 1024 x 768 resolution (160 degree

viewing angle)

Memory Standard 512MB 333-MHz DDR SDRAM (256MB in each slot)

Maximum 2GB, 1GB 333MHz DDR SDRAM in each slot

Hard Drive 40GB (4200rpm)

Discrete Video NVIDIA - GeForce 4 Go 420 32MB (4X AGP)

Communications Internal MDC 56K modem, NIC 10/100

Intel Pro/Wireless WLAN 802.11b/g, Bluetooth

Input Device Tablet PC Pen with tether, HP Tablet PC Keyboard with Pointstick

**Battery** 6-cell Lithium-Ion

Warranty Three year (Battery and digital pen carry a one-year warranty)



### Standard Features

CTC1100QP120X060NCf51T

PX284AA#ABA

(Intel® Centrino™ Mobile

Technology)

CPU Intel Pentium M 753\* (Ultra Low Voltage 1.2-GHz processor, 2-MB

cache and 400-MHz Front Side Bus)

\*NOTE: Intel's numbering is not a measurement of higher

performance.

Operating System Microsoft Windows XP Tablet PC Edition 2005

Display 10.4-inch color TFT XGA with 1024 x 768 resolution (160 degree

viewing angle)

Memory Standard 512MB 333-MHz DDR SDRAM with one open slot

Maximum 2GB, 1GB 333MHz DDR SDRAM in each slot

Hard Drive 60GB (5400rpm)

Discrete Video NVIDIA - GeForce 4 Go 420 32MB (4X AGP)

Communications Internal MDC 56K modem, NIC 10/100,

Intel Pro/Wireless WLAN 802.11b/g, Bluetooth

Input Device Tablet PC Pen with tether, HP Tablet PC Keyboard with Pointstick

Battery 6-cell Lithium-Ion

Warranty Three year (Battery and digital pen carry a one-year warranty)



## Options

Memory	256-MB 333-MHz RAM Memory Upgrade	DC389E
	512-MB 333-MHz RAM Memory Upgrade	DC390E
	1-GB 333-MHz RAM Memory Upgrade	DC890E
	NOTE: Due to the non-industry standard nature of some third-part recommend using only HP branded memory modules to ensure co	
MultiBay Devices	DVD+RW/CD-RW Drive	DG1898
	24X Combo DVD/CD-RW Drive	DC364E
	8X DVD Drive	DC352A
	24X Max CD-ROM Drive	DC351A
	MultiBay Diskette Drive	DC362A
	NOTE: MultiBay devices may only be used in External MultiBay or	Docking Station MultiBay.
MultiBay Storage	60-GB MultiBay Hard Drive (5400 rpm)	DC894 <i>A</i>
	80-GB MultiBay Hard Drive (5400 rpm)	DC920A
	NOTE: MultiBay hard drive options may only be used in External N	MultiBay or Docking Station MultiBay.
Expansion Bases	Tablet PC Docking Station	DC911A#ABA
	External MultiBay	DC373B#ABA
Power	Tablet PC Lithium-Ion battery pack (internal)	DC907/
Common Power Solutions	Battery Charger (single)	DF933A#ABA
	Battery Charger (multiple)	DF932A#ABA
	65W AC Adapter	DC359A#ABA
	90W Auto Adapter	DC303E
	90W Aircraft Cables	DC899A
Input Devices	Tablet PC Mobile Keyboard	PC875A#ABA
	Tablet PC Pen with tether	DG937A
	Tablet PC Pen with eraser	DM685A
	Wireless Keyboard & Mouse	DL989A#ABA
	USB/PS2 Keyboard & Mouse	DM687A#ABA
	External Enhanced III Keyboard (carbon)	DC852A#ABA
	USB Travel Optical Mouse	F2100A
	USB/PS2 Optical Mouse	DC369A
Security	Security Cable Lock	PC766 <i>F</i>



Options		
Communications	W500 wLAN 802.11a/b/g miniPCI Upgrade	DR469A#ABA
	Intel 802.11b/g wLAN	PF952AA#ABA
Removable Storage	USB Digital Drive with 128MB	DL702A
	SD Card Memory (128MB)	FA135A#AC3
	SD Card Memory (256MB)	FA136A#AC3
	SD Card Memory (512MB)	FA184A#AC3
Removable Storage - Floppy Drive	USB Floppy Drive	DC361B
Useful Accessories	Tablet PC Executive Workstation Portfolio	DC909A
Cases	HP Entry Value	DL617A
	Top Load Nylon	DC915A
	Sport Backpack	DG102A
	Portable Grip	DK504A
	Rugged Case	DK503A



Memory

## HP Compaq Tablet PC TC1100

Standard memory plus optional memory for the Celeron model. Not all configurations shown.

Men	nory	Factory or HP authorized service provider configured	User configurable	
Standard	256 MB	256 MB (266 MHz)	Empty	
Optional	512 MB	256 MB (266 MHz)	256 MB (333 MHz) <sup>1</sup>	
Optional	768 MB	256 MB (266 MHz)	512 MB (333 MHz) <sup>2</sup>	
Optional	1024 MB	512 MB (333 MHz)	512 MB (333 MHz)	
Optional	1536 MB	512 MB (333 MHz)	1 GB (333 MHz)	
Optional maximum	2 GB	1 GB (333 MHz)	1 GB (333 MHz)	

Standard memory plus optional memory for the Pentium-M model. Not all configurations shown.

Mei	mory	Factory or HP authorized service provider configured	User configurable
Standard	512 MB	512 MB (333 MHz)	Empty
Optional	768 MB	512 MB (333 MHz)	256 MB (333 MHz)
Optional	1024 MB	512 MB (333 MHz)	512 MB (333 MHz)
Optional	1536 MB	512 MB (333 MHz)	1 GB (333 MHz)
Optional maximum	2 GB	1 GB (333 MHz)	1 GB (333 MHz)

<sup>&</sup>lt;sup>1</sup> Memory will run at 266 MHz.

<sup>&</sup>lt;sup>2</sup> Memory will run at 266 MHz.

## Technical Specifications

System Unit Dimensions  $(H \times W \times D)$ 10.4-inch TFT panel 10.8 x 8.5 x 0.8 in (27.4 x 21.6 x 2.0 cm)

display

Weight **Approximate** 3.1 lb (1.4 kg) Tablet PC only

4 lb (1.8 kg) Tablet PC with keyboard

Stand-Alone Power

Requirements

Nominal Operating Voltage

14.8 VDC

40 W **Peak Operating Power** 

50° to 95° F (10° to 35° C) **Temperature** Operating

> -4° to 140° F (-20° to 60° C) Non-operating

10% to 90% relative humidity, non-condensing Relative Humidity Operating

> 5% to 90% relative humidity, 101.6° F (38.7° C) Non-operating

> > maximum wet bulb temperature

Shock 10 G, 11 ms, half-sine Operating

Non-operating 60 G, 11 ms, half-sine

Vibration 0.5 G, 10 to 500 Hz, 0.5 Oct/Min sweep rate Operating

> 1.0 G, 10 to 500 Hz, 0.5 Oct/Min sweep rate Non-operating

Maximum Altitude 0 to 10,000 ft (3,048 m), (14.7 to 10.1 psia) Operating (unpressurized)

0 to 30,000 ft (9,144 m), (14.7 to 4.4 psia) Non-operating

10.4-Inch Color TFT XGA Dimensions (H x W)

Display

9.29 x 6.82 in (23.6 x 17.3 cm)

10.4 in (26.41 cm) Diagonal Size

Mounting Internal Panel Supports, Flange Mounted

Number of Colors Up to 16.8M

Contrast Ratio 150:1

**Brightness** 140 nits typical

Pixel Resolution Pitch 0.264 x 0.264 mm

> **Format** 1024 x 768 Configuration RGB stripe

Backlight Edge Lit Character Display 80 x 25

Wide Viewing Angle 100-degree wide viewing angle or 160-degree ultra wide viewing angle,

MHz)

Standard with Pentium SKUs

depending on configuration

Memory (optional) Slot 1 256-MB 266-MHz DDR Standard with Celeron SKUs (may also use 333

(Factory and HP

authorized service provider 256-MB 333-MHz DDR

configurable only) 512-MB 333-MHz DDR

1-GB 333-MHz DDR

Slot 2 (available) 256-MB 333-MHz DDR

512-MB 333-MHz DDR

1-GB 333-MHz DDR



0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)

# **QuickSpecs**

## Technical Specifications

External AC Adapter	Weight	0.62 lb (0.28 kg)	
	Power Supply (Input)	Operating Voltage	90 to 260 VAC RMS

Operating Current 1.7 A RMS
Operating Frequency 47 to 63 Hz AC

Range

Internal Lithium-IonWeight0.65 lb (0.30 kg)Battery PackCells6-cell Lithium-Ion

Energy Voltage 11.1 V
Amp-hour capacity 3.6 Ah
Watt-hour capacity 40 Wh

Temperature Operating (Charging) 32° to 104° F (0° to 40° C)

Operating (Discharging) 14° to 122° F (-10° to 50° C)

Non-operating -4° to 140° F (-20° to 60° C)

Battery Re-Charge Time System in OFF mode or 3 hours

Standby

System ON (depending of 3 to 5 hours

system power consumption)

Tablet PC Pen(s)Pen with tether (standard)Dimensions (Length)5.1 in (130.1 mm)

Weight 0.66 oz (18.7 g)

Pen with eraser (optional) Dimensions (Length) 5.1 in (130.1 mm)

Weight 0.66 oz (18.7 g)

MultiBay DVD+RW/CD- MultiBay Drive Dimensions (H x W x D) RW Drive (optional) Weight

Weight 0.55 lb (0.25 kg)

Center Hole Diameter 15 mm

Disk Diameter 12 cm/8 cm

Disk Thickness 1.2 mm

Track Pitch 0.74  $\mu$ m

Access Times Random CD < 175 ms (typical reads, including

settling) Full-Stroke CD < 285 ms

Audio Output Level Line-out 0.7 Vrms

Cache Buffer 128 KB/s (minimum)

## Technical Specifications

Data Transfer RateDVD+R (2X max write)2700 KB/s(typical, including settling)DVD+RW (2X max write)2700 KB/s

CD-R (16X max write) 2400 KB/s (150 KB/s at 1X CD rate)
CD-RW (8X max write) 1200 KB/s (150 KB/s at 1X CD rate)
CD-ROM (24X max read) 3600 KB/s (150 KB/s at 1X CD rate)
DVD (8X max read) 10,800 KB/s (1352 KB/s at 1X DVD rate)

16.6 MB/s

Normal PIO Mode 4

(single burst)

Start-up Time < 15 seconds
Stop Time < 6 seconds

## MultiBay DVD/CD-RW Drive (optional)

**MultiBay Drive** Dimensions (H x W x D) 0.5 x 5.22 x 5.46 in (1.35 x 13.28 x 13.88 cm)

Weight 0.551 lb (250 g)

Access Times Random <110 ms CD (typical reads, including <130 ms DVD

Full-Stroke <210 ms CD

Max data transfer rate 24X CD-ROM 3,600 KB/s

8X DVD 10,800 KB/s 24X CD-R 3,600 KB/s 24X CD-RW 3,600 KB/s

**Transfer Mode** Multiword DMA Mode 2

Interface EIDE

settling)

Supported Media (read) CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED

MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW,

DVD-RAM

Supported Media (write) CD-R, CD-RW

Media Capacity 4.7 GB
Transport Tray Loading



## Technical Specifications

Technical Specitication	ons			
MultiBay CD-RW Drive (optional)	MultiBay Drive	Dimensions (H x W x D) Weight	0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm) 0.74 lb (0.34 kg)	
	Center Hole Diameter	0.59 in (1.5 cm)	,	
	Disk Diameter	12 cm/8 cm		
	Disk Thickness	0.047 in (1.2 mm)		
	Track Pitch	0.74 μm		
	Access Times	Random	< 150 ms	
	(typical reads, including settling)	Full-Stroke	< 225 ms	
	Audio Output Level	Line-out	0.7 Vrms	
	Cache Buffer	128 KB/s (minimum)		
	Data Transfer Rate	Sustained (16X)	150 KB/s	
	(typical, including settling)	Sustained 4X CD-RW	5,520 KB/s	
		Normal PIO Mode 4 (single burst)	16.6 MB/s	
	Start-up Time	< 15 seconds		
	Stop Time	< 6 seconds		
MultiBay DVD-ROM Drive MultiBay Drive (optional)		Dimensions (H x W x D) Weight	0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm) 0.66 lb (0.3 kg)	
	Center Hole Diameter	0.59 in (1.5 cm)	, 0,	
	Disk Diameter	12 cm/8 cm		
	Disk Thickness	0.43 in (1.09 cm)		
	Track Pitch	0.74 μm		
	Access Times	Random (typical)	< 180 ms DVD Media	
	(typical reads, including	Full-Stroke (typical)	< 300 ms DVD Media	
	settling)	Random (typical)	< 120 ms CD Media	
		Full-Stroke (typical)	< 200 ms CD Media	
	Cache Buffer	512 KB/s (minimum)		
	Data Transfer Rate	Max 24X CD	3600 KB/s (150 KB/s at 1X CD rate)	
	(typical, including settling)	Max 8X DVD	10,800 KB/s (1352 KB/s at 1X DVD rate)	
		Normal PIO Mode 4 (single burst)	16.6 MB/s	



Start-up Time

**Stop Time** 

< 12 seconds

< 3 seconds

## Technical Specifications

MultiBay 24X CD-ROM

MultiBay Drive Drive (optional)

Dimensions ( $H \times W \times D$ )

0.5 x 5.21 x 4.97 in (1.27 x 13.25 x 12.61 cm)

Weight

0.50 lb (0.23 kg)

Applicable Disk

CD-ROM (Mode 1, 2 and 3), CD-XA ready (Mode 2, Form 1 and 2), CD-I ready (Mode 2, Form 1 and 2), CD-R (read only), CD Plus, Photo CD (Single

and Multi-session), CD-Extra, Video CD, CD-WO (fixed packets only), CD-

Bridge

Center Hole Diameter

0.59 in (15 mm) 12 cm, 8 cm

Disk Diameter **Disk Thickness** 

0.047 in (0.12 cm)

Track Pitch

 $1.6 \, \mu m$ 

**Access Times** (typical reads, including Random

settling)

Full-Stroke

 $< 150 \, \text{ms}$  $< 300 \, ms$ 

Line-out

0.7 Vrms

Audio Output Level Cache Buffer

128 KB

Data Transfer Rate (typical, including settling) Sustained (16X)

150 KB/s (sustained 1X)

Variable

1500 to 3600 KB/s (10X to 24X)

Normal PIO Mode 4

(single burst) < 8 seconds

< 4 seconds

Start-up Time Stop Time

16.66 MB/s

Internal MDC 56K Modem

(Modem Specifications)

Modem Device Driver Name

Data Mode Capabilities

56K modem (a-law, mu-law)

V.8bis

V.80

V.44, V42.bis, MNP5 (Compression)

V.42 (LAPM, MNP2-4) (Error Correction)

V.34 (file date: 10/96)

Optional symbol rates:

2800, 3429

Asymmetric Symbol rates

Synchronous primary channel data signaling rates:

33600, 31200

Automatic rate re-negotiation

V.32bis

V.32

V.23

V.22bis

V.22

V.21

Bell 212A

Bell 103J



## Technical Specifications

Fax Mode Capabilities TIA-578-S (Class 1)

T.30, T.4 (Group 3)

V.17 V.29 V.27ter

V.21 Channel 2

Command Set V.250 (Partial)

TIA-602

Identification: GMI, GMM, GMR Port control: IPR, ICF, IFC, Iirr Modulation: MS, MR, MA

Error control: ES, ER, EB, ESR, ETBM

Data compression: DS, DR

V.251

**Power Consumption** Transfer mode: < 200 mA, maximum

Standby mode: 5 mA, nominal

Integrated 10/100 NIC

Ethernet Features 10 Mbit/s operation (10BASE-T; IEEE 802.3i; IEEE 802.3 clauses 13-14)

100 Mbit/s operation (100BASE-TX; IEEE 802.3u; IEEE 802.3 clauses 21-

30)

Auto-Negotiation (Automatic Speed and Duplex Selection)

**HP Auto-MDIX** 

Full Duplex and Half Duplex operation at 10 and 100 Mbit/s IEEE 802.3x Flow Control (IEEE 802.3 clauses 31-32; configurable)

Power Management ACPI 1.1 compliant -- multiple power modes

Situation-sensitive features reduce power consumption

Manageability PXE 2.0 Remote Boot

Statistics Gathering (RMON, Ethernet-like MIB, Ethernet MIB (802.3x, clause

30))

Comprehensive diagnostic and configuration software suite

NIC Device Driver Name

Broadcom 440x 10/100 Integrated Controller

Drivers Available

Microsoft Windows XP, Windows 2000

DOS NDIS2 and ODI

HP W500 802.11a/b/g

WLAN (available as a special configuration)

Wireless LAN Standards IEEE 802 Part 11a (802.11a)

IEEE 802. Part 11b (802.11b) IEEE 802. Part 11g (802.11g)

Interoperability Wi-Fi certified Frequency Band 2.4 and 5 GHz

**Data Rates** 802.11a; 6,9,12,18,24,36,48,54 Mbps

802.11b; 1,2,5.5,11 Mbps

802.11g; 6,9,12,18,24,36,48,54 Mbps

Modulation Direct Sequence Spread Spectrum

DBPSK, DQPSK, CCK, OFDM

## Technical Specifications

**Security** 64 and 128 bit WEP encryption

Support for WiFi Protected Access (WPA) including TKIP, MIC

Hardware-accelerated support for the Advanced Encryption Standard (AES;

256-bit encryption)

Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP

(Microsoft implementation)

Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program).

Sub-channels Multinational support with frequency bands and channels compliant to local

regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture Ad-hoc (Peer to Peer)

Models Infrastructure (Access Point Required)

Roaming IEEE 802.11 compliant roaming between 802.11a and 802.11b/g access

points

Output Power 802.11b: 17 dBM (typical)

802.11a/g: 15 dBM (typical)

Power Consumption Transmit: 2.0 W (max)

Receive: 1.5 W (max) Sleep mode: 20 mW (max)

Power Management ACPI compliant power management

802.11 Compliant Power Saving Mode

Power Saving Mode selectable through the configuration utility

**Receiver Sensitivity\*** 54 Mbps: -70 dBm to 1 Mbps: -90 dbm

Antenna type High efficiency dual band antenna with polarization diversity, mounted in the

display enclosure

Range 802.11a - Typical 500 feet - Outdoors Open Area

150 feet - Indoor, Office-environment

802.11 b - Typical 1200 feet - Outdoor Open Area

300 feet - Indoor, Office environment

802.11 g - Typical 1000 feet - Outdoor Open Area

200 feet - Indoor, Office environment

Form Factor MiniPCI Type IIIA
Weight 0.036 lb (16.5 gm)

**Dimensions** 0.19 x 2.00 x 2.35 in (4.8 x 50.95 x 59.75 mm)

Operating Voltage 3.3v

**Temperature** Operating  $32^{\circ}$  to  $122^{\circ}$  F ( $0^{\circ}$  to  $50^{\circ}$  C)

Non-operating  $-14^{\circ}$  to  $158^{\circ}$  F (-10 to  $70^{\circ}$  C)

Humidity Operating 10 to 90%

Non-operating 5 to 95%

Altitude Operating 0 to 15,000 ft (4,572 m)

Non-operating 0 to 40,000 ft (12,192 m)

**Configuration Utility** Choice of Configuration Utility:

 Atheros Client Utility (required for Cisco Compatible Extensions support)

• Microsoft Windows XP Wireless Zero Configuration Utility

NOTE: may also be compatible with certain third party software supplicants



## Technical Specifications

LED Activity LED Off - WLAN and Bluetooth Radio OFF; Solid Green LED - WLAN or

Bluetooth Radio ON

(please refer to your Tablet PC documentation to determine whether WLAN

or Bluetooth is activated)

\*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation)

Intel Pro/Wireless 2915ABG 802.11a/b/g **WLAN** 

Wireless LAN Standards IEEE 802.11a

> IEEE 802.11b IEEE 802. 11g

Wi-Fi certified (details available at http://www.hp.com/go/WLAN) Interoperability

Frequency Band 2.4 and 5 GHz

802.11b: 1, 2, 5.5, 11 Mbps Data Rates

802.11g: 6, 9, 12,18, 24, 36, 48, 54 Mbps

Modulation Direct Sequence Spread Spectrum

DBPSK, DQPSK, CCK, OFDM

Security Supports 64- and 128-bit WEP, WPA, hardware-accelerated AES, 802.1x

> authentication types EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, LEAP, EAP-FAST. Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible

Extensions Program).

Sub-channels Multinational support with frequency bands and channels compliant to local

regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture Ad-hoc (Peer to Peer)

Models

Infrastructure (Access Point Required)

IEEE 802.11 compliant roaming between access points. Roaming

+16 dBm +/-2 dB'+16 dBm +/-2 dB (for CKK)Output Power

+15 dBm + 2 / -5 dB ((for OFDM; power varies by data rate)

Power Consumption Transmit: 1.8 Watts (max)

> Receive: 1.4 Watts (max) Idle mode: 100 mW, nominal

Power Management ACPI compliant power management

802.11 Compliant Power Saving Mode

Receiver Sensitivity\* 54 Mbps: -72 dBm, 11 Mbps: -89 dBm, 1 Mbps: -97 dBm

High efficiency dual band antenna with polarization diversity, mounted in the Antenna type

display enclosure

## Technical Specifications

Range (typical)	802.11a - Typical	600 ft (82.88 m) at 1 Mbps -	Outdoors Open
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Area

150 ft (45.72 m) at 1 Mbps - Indoor, Office-

environment

802.11b - Typical 1200 ft (365.76 m)at 1 Mbps - Outdoors Open

Area

300 ft (91.44 m) at 1 Mbps - Indoor, Office-

environment

250 ft (76.2 m)at 54 Mbps - Indoor, Office-

environment

802.11g - Typical 1200 ft (365.76 m) at 1 Mbps - Outdoors Open

Area

300 ft (91.44 m) at 1 Mbps - Indoor, Office-

environment

50 ft (15.24 m)at 54 Mbps - Indoor, Office-

environment

Form Factor MiniPCI Type IIIB
Weight 0.026 lb (11.75 g) max

**Dimensions** 0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)

Operating Voltage 3.3v +/- 10%

**Temperature** Operating 32° to 176°F (0° to 80°C)

Non-operating -40° to 176°F (-40° to 80°C)

Humidity Operating 0 to 90% (non-condensing)

Non-operating 5 to 95% (non-condensing)
Operating 0 to 10,000 ft (3,048 m)

Altitude Operating 0 to 10,000 ft (3,048 m)

Non-operating 0 to 50,000 ft (15,240 m)

Microsoft Windows XP Wireless Zero Configuration Utility

Intel PROset for Microsoft Windows 2000 or XP

LED Activity LED Off - Radio OFF; Solid LED - Radio ON

Intel Pro/Wireless 2200BG 802.11b/g WLAN Wireless LAN Standards IEEE 802.11b

Configuration Utility

IEEE 802. 11g

Interoperability Wi-Fi certified (details available at http://www.hp.com/go/WLAN)

Frequency Band 2.402 - 2.494 GHz

**Data Rates** 802.11b: 1, 2, 5.5, 11 Mbps

802.11g: 6, 9, 12,18, 24, 36, 48, 54 Mbps

Modulation Direct Sequence Spread Spectrum

DBPSK, DQPSK, CCK, OFDM

**Security** 64 and 128 bit WEP encryption

Support for WiFi Protected Access (WPA) including TKIP, MIC

Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP

(Microsoft implementation); more details available at

http://www.hp.com/go/WLAN).

Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program).



<sup>\*</sup>Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).

## Technical Specifications

Sub-channels Multinational support with frequency bands and channels compliant to local

regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture Ad-hoc (Peer to Peer)

Models Infrastructure (Access Point Required)

Roaming IEEE 802.11 compliant roaming between access points.

Output Power  $16 \pm 2 \text{ dBM for CCK}$ 

11 + 6/-1 dBM for OFDM (power varies by data rate)

Maximum output power may vary by country according to local regulations

Power Consumption Transmit: 1.8 Watts (max)

Receive: 1.0 Watts (max) Idle mode: 75mW, nominal

Power Management ACPI compliant power management

802.11 Compliant Power Saving Mode

Receiver Sensitivity\* 54 Mbps: -72 dBm, 11 Mbps: -84 dBm , 1 Mbps: -94 dBm

Antenna type High efficiency dual band antenna with polarization diversity, mounted in the

display enclosure

Range (typical) Outdoor 1200 feet at 1 Mbps

250 feet at 54 Mbps

Indoor 300 feet at 1 Mbps

50 feet at 54 Mbps

Form Factor MiniPCI Type IIIB

**Weight** 0.026 lb (11.75 g) max

**Dimensions** 0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)

Operating Voltage 3.3 V

**Temperature** Operating 32° to 158° F (0° to 70° C)

Non-operating  $-40^{\circ}$  to  $176^{\circ}$  F ( $-40^{\circ}$  to  $80^{\circ}$  C)

Humidity Operating 0 to 90% (non-condensing)

Non-operating 5 to 95% (non-condensing)

Altitude Operating 0 to 10,000 ft (3,048 m)

Non-operating 0 to 50,000 ft (15,240 m)

Configuration Utility Choice of Configuration Utility:

 Intel PROset for Microsoft Windows 2000 or XP (required for Cisco Compatible Extensions support)

Companible Extensions support)

Microsoft Windows XP Wireless Zero Configuration Utility

NOTE: May also be compatible with certain third party software supplicants.

LED Activity LED Off - Radio OFF; Solid LED - Radio ON

\*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation).

### Technical Specifications

Intel Pro/Wireless 2100 802.11b WLAN Wireless LAN Standards IEEE 802. Part 11b (802.11b)

InteroperabilityWi-Fi certifiedFrequency Band2.4 GHz

Data Rates 802.11b; 1,2,5.5,11 Mbps

Modulation Direct Sequence Spread Spectrum

DBPSK, DQPSK, CCK

**Security** 64 and 128 bit WEP encryption

Support for WiFi Protected Access (WPA) including TKIP, MIC

Support for 802.1x authentication types: EAP-TLS, LEAP (Cisco), PEAP

(Microsoft implementation)

Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program).

Sub-channels Multinational support with frequency bands and channels compliant to local

regulations.

Media Access Protocol CSMA/CA (Collision Avoidance) with ACK

Network Architecture Ad-hoc (Peer to Peer)

Models Infrastructure (Access Point Required)

Roaming IEEE 802.11 compliant roaming between 802.11b access points

Output Power 16 dBM (typical)

Power Consumption Transmit: 2.0 W (maximum)

Receive: 1.5 W (maximum) Sleep mode: 200 mW, nominal

Power Management ACPI compliant power management

802.11 Compliant Power Saving Mode

**Receiver Sensitivity\*** 11 Mbps: -82 dBm to 1 Mbps: -89 dBm

Antenna type High efficiency dual band antenna with polarization diversity, mounted in the

display enclosure

Range 802.11b - Typical 1200 feet (365.85 m) - Outdoor Open Area

300 feet (91.46 m) - Indoor, Office environment

Form Factor MiniPCI Type IIIB

**Weight** 0.026 lb (11.75 gm) (maximum)

Dimensions 0.20 x 1.75 x 2.34 in (4.9 x 44.6 x 59.8 mm)

Operating Voltage 3.3 V

**Temperature** Operating 32° to 158° F (0° to 70° C)

Non-operating  $-40^{\circ}$  to  $176^{\circ}$  F ( $-40^{\circ}$  to  $80^{\circ}$  C)

**Humidity** Operating 0 to 90% (non-condensing)

Non-operating 5 to 95% (non-condensing)

Altitude Operating 0 to 10,000 ft (3,048 m)

Non-operating 0 to 50,000 ft (15,240 m)

## Technical Specifications

Configuration Utility Choice of Configuration Utility:

> Intel ProSet (required for Cisco Compatible Extensions support) Microsoft Windows XP Wireless Zero Configuration Utility

NOTE: May also be compatible with certain third party software supplicants.

LED Off - Radio OFF; Solid LED - Radio ON **LED Activity** 

\*Receiver sensitivity is measured at a packet error rate of 8% for 802.11b (CKK modulation) and a packet error rate of 10% for 802.11a/g (OFDM modulation)

Bluetooth by HP Form Factor Integrated USB module

> **Bluetooth** 1.1 Compliant **Dimensions** 26 x 14 x 5.7 mm

**Temperature** Operating -4° to 158° F (-20° to 70° C)

> -40° to 176° F (-40° to 80° C) Non-operating

Humidity 10 to 90% operating

5 to 95% non operating

Altitude Operating 15,000 ft (4572 m)

> 40,000 ft (12,192 m) Non-operating

Plug and Play USB 1.1 compliant

Microsoft Windows Plug and Play compliant

Frequency Band 2402 to 2480 MHz

Number of Available

Channels

79 (1 MHz) available channels

Data Rates and 1 Mbps

throughput Synchronous Connection Oriented links up to 3, 64 kbps, voice channels

Asynchronous Connection Less links 723.2 kbps/57.6 kbps asymmetric or

433.9 kbps symmetric

Antenna type Internally integrated within module

33 ft (10 m) Range

**Software Stack Supported** User may choose:

Microsoft User Interface (Profiles supported: HID, DUN, HCRP)

Widcomm User Interface (see profile support below)

**Profile Support** General Access Profile

Service Discovery Application Profile

Serial Port Profile

Generic Object Exchange Profile

File Transfer Profile Synchronization Profile Dial-Up Networking Profile

LAN Access Profile Object Push Profile

Hard Copy Cable Replacement Profile Personal Area Networking Profile Human Interface Device Profile



## Technical Specifications

Usage Models Service Discovery (determine what Bluetooth devices are within range and

support authorization)

**Synchronization**: PDAs to PCs Portable to Desktop

File Transfer:

File and directory browsing and navigation on another Bluetooth device.

File copying

Object manipulation - including add, delete, create new folders etc.

Wireless link to Corporate LAN using several Bluetooth devices sharing the

same

Access Point:

Corporate email, network neighborhood, access to LAN applications, file

transfer, ftp, Internet browsing, etc, using TCP/IP

Wireless link to WAN thru cell phone

Agnostic to WAN technology Send/receive SMS messages Wireless link to Printer

Adhoc peer to peer networking (two computers) or Personal Area

Networking (PAN) using NDIS (< 7 computers)
Adhoc Bluetooth Pico-networking (point to multi-point)
Object Push - Business card or appointment exchange

Human Interface Devices

Wirelessly interface to notebook with mouse, keyboard, etc

Printing

Wirelessly print to Bluetooth enabled printers

**Transmit Power** -6dBm to 4 dBm (Bluetooth Class II)

Receive Sensitivity

Better than -80 dBM at 0.1 % raw bit error rate

Link Topology

Point to Point, Multipoint Pico Nets up to 7 slaves

Security Full support of Bluetooth Security Provisions

Network Architecture Ad-hoc (Peer to Peer)

Models

Infrastructure (Access Points Required)

Power Requirement Peak < 270 mW

Power Management Microsoft Windows ACPI, and USB Bus Support

Wireless EAB On/Off
Software On/Off control

Self configurable to optimize power conservation in all operating modes,

including Standby, Hold, Park, and Sniff

Protocols Supported TCP/IP

IPX/SPX

UDP

LED Activity Solid Green LED - Wireless Bluetooth or WLAN On

LED Off - Wireless Bluetooth and WLAN Power Off

(please refer to your Tablet PC documentation to determine whether WLAN

or Bluetooth is activated)





## Technical Specifications

Certifications

All necessary regulatory approvals for countries we support including

FCC (47 CFR) Part 15C, Section 15.247 & 15.249

ETS 300 328, ETS 300 826 Low Voltage Directive IEC950

UL, CSA, and CE Mark

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